## **BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.** 

NAME: John R. Corboy, M.D.

#### eRA COMMONS USER NAME (credential, e.g., agency login): CORBOY.J

#### POSITION TITLE: Professor of Neurology, University of Colorado

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Pennsylvania, Philadelphia, PA	B.A.	1976	Anthropology
University of California at Los Angeles, CA	M.A.	1978	Anthropology
University of Pennsylvania, Philadelphia, PA	M.D.	1985	Medicine
University of Pennsylvania, Philadelphia, PA	Residency	1989	Medicine, Neurology
Johns Hopkins University, Baltimore, MD	Fellow	1989-92	Neurovirology

#### A. Personal Statement

I have a long-standing interest and extensive experience in the care and clinical research of multiple sclerosis patients. In 1997, I founded the University of Colorado Multiple Sclerosis Center, now called the Rocky Mountain Multiple Sclerosis Center at University of Colorado, of which I am Co-Director. We see, as a group, ~9000 MS patient visits per year, and our group is involved in between 15-40 clinical research projects at any one time. We have a significant interest in enhancing the treatment of major symptoms of MS and other immune compromising neurologic conditions throughout one's life. For the past 10 years I have directed the 40 year old Rocky Mountain Tissue Bank at the University of Colorado Anschutz Medical Campus. In 2014, Dr. Jill Norris and I formulated the study RISk factors in Early MS (RISEMS), designed to define the earliest possible markers, perhaps a risk algorithm, for asymptomatic individuals aged 18-30 at high genetic risk (first-degree relatives of those with MS) of developing MS. We have recently extended this to include individuals aged 10-17, in the DREAMS study. I am the overall PI in the 20-Center, PCORI-funded "Randomized, discontinuation trial of disease modifying therapies in MS", the DISCOMS trial and an extension study. My extensive experience in clinical research and MS, along with my direction of the multi-site DISCOMS trial, qualifies me to work as a senior Co-Investigator and mentor to Dr. Amanda Piquet, in the design and execution of this proposed, important and timely project, [TITLE HERE]

Ongoing and recently completed projects that I would like to highlight include:

SRA-DISCO MS Extension Corboy & Cutter (Co-PIs) 12/17/2021 – 06/01/2023 EMD Serono, Inc., Multiple Sclerosis Leadership and Innovation Network (MS-LINK) Discontinuation of Disease Modifying Therapies (DMTs) in Multiple Sclerosis (MS): Extension of the DISCOMS Study

The goal of this study is to extend by 1 year the data collection of the original 2 year DISCOMS study funded by PCORI which seeks to understand if MS patients aged 55 years and over, with no recent sings of new inflammatory disease activity while on an approved MS DMT, may safely discontinue DMTs. Role: Co-PI

CER-1503-27915 PCORI Corboy (PI)

#### R-1610-26029 NMSS Discontinuation of Disease Modifying Therapies in MS (DISCOMS) A randomized discontinuation multi-site trial in stable MS patients 55 and older, taking disease modifying therapies for at least the last five years. Role: PI for study and site

Philanthropy Gift Corboy (PI) **Risk Factors in Early MS** 

This goal of this study is to improve understanding of the very earliest signs of Multiple Sclerosis (MS) by looking at characteristics of individuals at high risk of developing MS, especially young adults first degree relatives of those already diagnosed with MS. Role: PI

SI-2011-37165 National MS Society Corboy (PI)

The RMMSC Tissue Bank collects, characterizes and distributes autopsied tissues to researchers interested in MS, dementias and other neurologic conditions around the world. Role: PI and Director

Novartis Corboy (PI)

**Clinical Trial Siponimod** 

A multicenter, randomized, double-blind, parallel-group, placebo-controlled variable treatment duration study evaluating the efficacy and safety of Siponimod (BAF312) in patients with secondary progressive multiple sclerosis Role: PI

#### **B.** Positions, Scientific Appointments and Honors **Research and/or Professional Experience**

2019- present Executive Vice Chair, Dept of Neurology, University of Colorado School of Medicine 2019-present Inaugural Charles Elliot Morris Endowed Chair in Neurology, CU-SOM 2017-present Vice Chair for Clinical Affairs, Dept of Neurology, University of Colorado 2010-present Founding Editor, Neurology Clinical Practice 2009-present Director, Rocky Mountain MS Center Tissue Bank 2015-present Vice Chair for Faculty Affairs, Dept of Neurology, University of Colorado 2006-present Professor, Department of Neurology, UC Anschutz Medical Campus, Aurora, CO Associate Professor, Department of Neurology, UCHSC, Denver, CO 2000-2006 2000-2002 Vice Chairman, Department of Neurology, UCHSC, Denver, CO 1995-2000 Residency Director, Department of Neurology, UCHSC, Denver, CO 1995-2001 Assistant Professor, Department of Neurology, UCHSC, Denver, CO 1992-1994 Assistant Professor of Neurology, University of Minnesota, Minneapolis, MN

# Honors

- 2007-2020 Best Doctors in America
- 2006 Denver Health Medical Center, Volunteer Physician of the Year
- 2003 National Multiple Sclerosis Society, Denver Chapter, Healthcare Provider of the Year
- 2000 National Multiple Sclerosis Society, Denver Chapter, Programs Volunteer of the Year
- 1997 National Multiple Sclerosis Society, Corporate Achievers Award
- 1987 Dinon Teaching Award, Hospital of University of Pennsylvania
- 1985 Alpha Omega Alpha Honor Society
- Alpers Clinical Neurology ward, University of Pennsylvania School of Medicine 1985

# **Public Advisory Committees**

2017-present AAN Science Committee

2010-2016 **AAN Meeting Management Committee** 

2005-2011 National Multiple Sclerosis Society, National Chapter, Professional Education Committee 2005-present National Multiple Sclerosis Society, Colorado Chapter, Board Member

# 01/012016-9/30/2022

01/01/2018-12/31/2021

10/01/2020 - 9/30/2022

07/01/2013-6/30/2021

- 1999-2001 Lupus Foundation of Colorado, Inc., Health Advisory Board, Neurology Advisor
- 1997-2009 American Academy of Neurology (AAN), A.B. Baker Committee on Education and
  - Subcommittee on Graduate Education; Chair, 2003-09
- 1991-1993 NIH Virology Section Review, Ad Hoc Member

## Societies

2005-present American Neurological Association (elected)

- 1994-present Colorado Society of Clinical Neurologists, 1995-1997 Secretary/Treasurer
- 1993-1995 American Society for Microbiology
- 1987-present American Academy of Neurology, Fellow 2003
- 1989-1995 American Association for the Advancement of Science

## C. Contributions to Science

- 1. **Diagnosis and Misdiagnosis of MS.** I have a longstanding interest in multiple sclerosis (MS) and related disorders, including correct diagnosis, what leads to misdiagnosis, and effects of misdiagnosis.
  - Solomon AJ, Corboy JR. <u>The tension between early diagnosis and misdiagnosis of multiple</u> <u>sclerosis.</u> Nat Rev Neurol. 2017 Sep;13(9):567-572. doi:10.1038/nrneurol.2017.106. Epub 2017 Aug 11. Review. No abstract available. PMID: 28799551
  - b. Carmosino MJ, Brousseau KM, Arciniegas DB, Corboy JR. Initial evaluations for multiple sclerosis in a university multiple sclerosis center: Outcomes and the role of magnetic resonance imaging in referral. Arch Neurol. 2005; 62: 585-590
  - c. Brousseau KB, Arciniegas D, Corboy JR. The Differential Diagnosis of Axis I Psychopathology Presenting to a University-Based Multiple Sclerosis Clinic. Multiple Sclerosis, 2007 Jul;13(6):749-753. Epub 2007 Mar 15.
  - d. Frohman TC, Frohman EM, O'Suilleabhain P, Salter A, Dewey RB Jr, Hogan N, Galetta S, Lee AG, Traumann D, Noseworthy J, Zee D, Corbett J, Corboy J, Rivera VM, Kramer PD. Accuracy of clinical detection of INO in MS: Corroboration with quantitative infrared oculography. Neurology. 61(6):848-850, 2003.
- 2. Clinical Trials and Real World Experience. I have participated in over 60 clinical trials in MS and related conditions, both industry-sponsored and investigator-initiated. Most importantly, I am presently the principal investigator of a 20-center study looking at whether it is possible to discontinue disease modifying therapies or not in aging and stable MS patients (NCT03073603). This is funded by PCORI and NMSS. I also am the PI of the longstanding Rocky Mountain MS Center Tissue Bank, funded by the National MS Society. This bank collects and distributes autopsied tissues to MS researchers around the world.
  - a. Vollmer B, Ontaneda D, Bandyopadhyay A, Cohn S, Nair K, Sillau S, Bermel RA, Corboy JR, Fox RJ, Vollmer T, Cohen JA, Alvarez E, Hersh CM. Neurol Clin Pract. 2018 Aug;8(4):292-301. doi: 10.1212/CPJ.00000000000487. Discontinuation and comparative effectiveness of dimethyl fumarate and fingolimod in 2 centers.
  - Nash RA, Bowen JD, McSweeney PA, Pavletic ZS, Maravilla KR, Park M-S, Corboy JR, et al. High-dose immunosuppressive therapy and autologous peripheral blood stem transplantation in severe multiple sclerosis. *Blood* 102 (7): 2364-72, 2003.
  - c. Cree BAC, Goldman MD, Corboy JR, Singer BA, Fox EJ, Arnold DL, Ford C, Weinstock-Guttman B, Bar-Or A, Mientus S, Sienkiewicz D, Zhang Y, Karan R, Tenenbaum N; <u>Efficacy and Safety of 2 Fingolimod Doses vs Glatiramer Acetate for the Treatment of Patients With Relapsing-Remitting Multiple Sclerosis: A Randomized Clinical Trial.</u> ASSESS Trial Investigators. *JAMA Neurol.* 2020 Aug 24:e202950. doi: 10.1001/jamaneurol.2020.2950. Online ahead of print.PMID: 32852530
  - Vollmer B, Honce JM, Sillau S, Corboy JR, Vollmer T, Nair K, Alvarez E. The Impact of very short transition times on switching from Natalizumab to Fingolimod on imaging and clinical effectiveness outcomes in multiple sclerosis. *J Neurol Sci.* 2018 Jul 15;390: 89-93. PMID:29801915

- 3. **Cost Utilization.** I have a longstanding relationship with the pharmaco-economic group at the University of Colorado, where we have investigated cost-effectiveness and quality comparisons of MS medications.
  - a. Kister I, Corboy JR. <u>Reducing costs while enhancing quality of care in MS.</u> Neurology. 2016 Oct 11;87(15):1617-1622: 10.1212/WNL.000000000003113. [Epub ahead of print] PMID:27590294
  - b. Corboy JR. <u>Disease-modifying therapies can be safely discontinued in an individual with stable relapsing-remitting MS Commentary.</u> Mult Scler. 2017 Jun 1:1352458517717809. doi: 10.1177/1352458517717809. [Epub ahead of print] No abstract available. PMID: 28673113
  - c. Nair KV, **Corboy J**, Kahler K, Allen R, et al. Use of diagnostic tests and procedures for diseasemodifying therapy users and non-disease-modifying therapy users with multiple sclerosis. Expert Rev. Neurother, 2011; 11(6): 787–798.
  - d. McQueen R, Livingston T, Vollmer T, **Corboy J**, Buckley B, Allen R, Nair K, and Campbell J. Increased relapse activity for multiple sclerosis natalizumab users who become non-persistent: a retrospective study. J Manag Care Spec Pharm. 2015 Mar;21(3):210-8b
- 4. **Investigator-Initiated Trials.** Our group has a longstanding interest in proposing and completing unique add-on, repurposing or other clinical trials.
  - a. Honce JM, Nair KV, Hoyt BD, Seale RA, Sillau S, Engebretson E, Schurr B, Corboy JR, Vollmer TL, Alvarez E. Brain Atrophy Rates for Stable Multiple Sclerosis Patients on Long-Term Fingolimod versus Glatiramer Acetate. *Front Neurol.* 2020 Sep 23;11:1045. doi: 10.3389/fneur.2020.01045. eCollection 2020.PMID: 33071934
  - b. Honce JM, Nair KV, Sillau S, Valdez B, Miravalle A, Alvarez E, Schreiner T, Corboy JR, Vollmer TL. <u>Rituximab vs placebo induction prior to glatiramer acetate monotherapy in multiple</u> <u>sclerosis.</u> *Neurology.* 2019 Feb 12;92(7):e723-e732. doi: 10.1212/WNL.000000000006916. Epub 2019 Jan 11.PMID: 30635477
  - c. Hebert JR, Corboy JR, Vollmer T, Forster JE, Schenkman M. Efficacy of Balance and Eye-Movement Exercises for Persons With Multiple Sclerosis (BEEMS). *Neurology*. 2018 Feb 27;90(9):e797-e807. doi: 10.1212/WNL.0000000000005013. Epub 2018 Jan 31. PMID: 29386274.
  - d. Vollmer, T.M., Key, L., Durkalski, V., Tyor, W., Corboy J, et al,: High dose oral simvastatin therapy in relapsing-remitting multiple sclerosis: an MRI study. *Lancet*, 363(9421):1607-8, 2004.
- 5. **Phenomenology**. Throughout my career, I have continued to see significant numbers of patients. This has resulted in a notable insights regarding phenomenology of clinical disease, either in large cohorts or in case reports. This includes the first case of a rare disease in adults, a re-evaluation of an obscure demyelinating disorder, a rare complication of a MS disease modifying therapy, and the first case of NMO-IgG positivity in a child.
  - a. Hassani A, **Corboy** JR, Al-Salam S, Khan G. Epstein-Barr virus is present in the brain of most cases of multiple sclerosis and may engage more than just B cells.PLoS One. 2018 Feb 2;13(2):e0192109. doi: 10.1371/journal.pone.0192109. eCollection 2018.PMID: 29394264
  - b. Hardy TA, Corboy JR, Weinshenker BG. Baló concentric sclerosis evolving from apparent tumefactive demyelination. Neurology. 2017 May 30;88(22):2150-2152. doi: 10.1212/WNL.00000000003990. Epub 2017 May 3. No abstract available. PMID: 28468846
  - c. Hudson LA, Bernard TJ, Tseng BS, Miller BR, **Corboy JR**. Neuromyelitis optica Immunoglobulin G in a child. Pediatric Neurology, 2006;35(5):370-2.
  - d. McGinley MP, Cola PA, Fox RJ, Cohen JA, **Corboy JR**, Miller D. Perspectives of individuals with multiple sclerosis on discontinuation of disease-modifying therapies. *Mult Scler*. 2019 Aug 1:1352458519867314. doi: 10.1177/1352458519867314. [Epub ahead of print. PMID: 31368401]